



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

## SECTOR 2 —CHART INFORMATION

## SECTOR 2

### SOUTHEAST COAST OF AFRICA—CAPE RECIFE T O PONTA DA BARRA

**Plan.**—This sector describes the SE coast of Africa from Cape Recife to Ponta Da Barra, a distance of about 823 miles NE.

#### General Remarks

**2.1** From the offing in the vicinity of Cape Padrone (33° 46'S., 26° 28'E.), the most conspicuous features are Nanquas Kop (Nankookop), which is 300m in height, and the high sandhills to the W, toward Woody Cape. Nanquas Kop, when seen from the S, appears flat-topped, but, proceeding E, it assumes a conical form, and is the most conspicuous feature on this part of the coast. It is recommended that vessels give this coast a berth of 4 to 5 miles.

The coast between the port of East London (33° 02'S., 27° 55'E.) and the Mbashe River (Bashee River) is a succession of rocky points, with sandy beaches between them. In general the coast is rugged and backed by high hills, but in places consists of perpendicular cliffs.

The coast between the Mbashe River and Port St. Johns is backed for the first 35 miles by a coastal ridge, 152 to 213m high, about 1 to 1.5 miles inland.

From Port St. Johns the coast continues being high as far as Waterfall Bluff (31° 26'S., 29° 48'E.), but NE the land slopes gently from a ridge, about 335 to 366m high, about 2 to 3 miles inland.

#### Cape Recife to Port Elizabeth

**2.2** From **Cape Recife** (34° 02'S., 25° 42'E.) to Cape Padrone, the coast recedes and forms a large bay. In general the coast is formed by sand beaches, backed by sand dunes which rise to heights of 175m.

Algoa Bay is entered between Cape Recife and Woody Cape (33° 46'S., 26° 20'E.); Cape Padrone. The bay is open to the full force of SE gales, which are frequent between October and March. At the height of these gales a heavy breaking sea rolls into the anchorage off Port Elizabeth, but vessels with plenty of chain out should ride easily.

**Tides—Curr ents.**—To the S of Bird Islands, the current is constantly SW and strong; a set towards the islands may be experienced. Within Algoa Bay there is frequently a countercurrent, particularly after SE gales, and the result may cause onshore sets. Within Algoa Bay tidal currents are negligible.

**Caution.**—Projectiles and mustard gas containers were dumped about 14 miles S of Cape Recife. These have spread over a considerable area between Cape St. Francis (34° 12'S., 24° 52'E.) and Bird Islands (33° 51'S., 25° 17'E.) out to depths of 400m.

Riy Bank (34° 00'S., 25° 53'E.), lying about 9 miles ENE of Cape Recife, is rocky and foul; it has a least depth of 11.6m. All ships, other than fishing vessels, should keep well clear of

this bank, which is normally marked by overfalls and broken water.

Unexploded ordnance has been reported to exist in a depth of 117m, about 24 miles ESE of Cape Recife.

#### Port Elizabeth (33° 58'S., 25° 37'E.)

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**2.3** Port Elizabeth is located in the SW part of Algoa Bay, about 5 miles NW of Cape Recife. The port comprises an outer anchorage and a harbor enclosed by the S breakwater and the Charl Malan Quay. The limits of the port are bound on the S by a line drawn for 1 mile E, from Cape Recife, on the N by a line drawn for 1 mile E of extreme point of the N bank of the Zwartkops River, and on the E by line joining the extremities of the above lines. The W boundary is along the foreshore between HW and LW marks from Cape Recife and the point on the N bank of Zwartkops River including that part of the river that lies on the seaward side of the railway bridge crossing the river.

**Winds—W eather.**—East and SE gales, the only dangerous winds in Algoa Bay, occur in the months from October to April, the worst weather usually happening at the beginning and close of the season. In the winter months the wind seldom blows from these quarters, except in the rare case, when what is known locally as a Black Southeast comes on; the appearance of the sky and sea give sufficient warning of the rain and thick weather, which follows. The Black Southeast are sometimes violent but do not last long.

The approach of summer gales are, to a certain extent, foretold by the irregular oscillation of the barometer which falls before the wind increases. A damp cold air prevails, and there is a constant hazy appearance about the horizon, the upper parts of the sky remain clear. Should the barometer be at 1030 mb, and cirrus clouds appear, a SE gale will set in before 24 hours have elapsed. Or if the hills N of Port Elizabeth are obscured by haze, a gale from the same quarter may be expected. Gales from this quarter rarely occur during the month of April.

With the gale at its height, a heavy and dangerous breaking sea rolls in, but vessels with plenty of chain generally ride easily; and, from the strong E set which prevails near the shore during these gales, it is probable that a powerful undertow assists to relieve the strain.

A seiche has been observed at Port Elizabeth.

**Tides—Curr est.**—A strong current is often experienced after passing Cape Recife. Allowance should be made for it in passing Roman Rock, about 1.5 miles NNW of Cape Recife Light, and no attempt should be made to pass between the rock and the mainland.

**Depths—Limitations.**—The approach channel will be kept dredged to a depth of 14.5m from its seaward end, which is about 2 miles NE of the S breakwater light. The entrance

between S breakwater and Charl Malan Quay is 0.2 mile wide with a dredged depth of 14m, in 1976.

Port Elizabeth	
Berth	Depth alongside
<b>Charl Malan Quay</b>	
Berth 100	11.0m
Berth 101	11.0m
Berth 102	12.2m
Berth 103	12.2m
<b>No. 2 Quay</b>	
Berth 8	11.0m
Berth 9	11.0m
<b>No. 3 Quay</b>	
Berth 10	10.0m
Berth 11	10.0m
Berth 12	5.5m to 7m
<b>Ore Berth</b>	
Berth 13	12.2m
Berth 14	12.2m
<b>Oil Tanker Berth</b>	
Berth 15	9.9m
Fisheries Jetty	6.5m
Tug Jetty	7.0m

The maximum length of passenger, dry cargo, and container vessels are subject to the Port Captain's prior approval; the maximum draft for these vessels is 11.6m. Tankers are limited to a length of 203m and a maximum draft of 9.3m. Ore carriers are limited to a length of 251m and a maximum draft of 11.6m. There are facilities for container and ro-ro vessels.

**Aspect.**—The red roof of the golf club house, 2 miles NW of Cape Recife Light, is conspicuous when viewed from the E. The large green painted Holiday Inn, with its distinctive sign, is located about 1 mile NNW of the club house.

A white octagonal tower, 26m high, stands on a hill 1.2 miles WSW from the head of the S breakwater. A conspicuous hospital is situated 2.2 miles WNW of the tower; a prison stands 2.3 miles NNE of the hospital. A conspicuous chimney stands 2.9 miles NW of the S breakwater head; another chimney stands 0.6 mile farther N.

**Pilotage.**—Pilotage is compulsory for merchant vessels entering, leaving, or shifting berth within the harbor. Ships must give advance notice of their ETA from the calling in points. The pilot boarding position is 33° 55.6'S, 25° 40.9'E.

**Regulations.**—The "Regulations for the Harbors of the Republic of South Africa" are in force at Port Elizabeth. Incoming vessels should communicate with Port Elizabeth Radio Station.

**Signals.**—Traffic signals are shown from the Port Control Building on the NE corner of Charl Malan Quay, as follows:

1. Fixed red light—Vessel leaving.
2. Fixed green light—Vessel entering.

3. Flashing red light—Port closed.

**Anchorage.**—The Algoa Bay anchorage outside the 15m curve, offers unlimited area in which a vessel can anchor. The bottom is good, mud, clay and shells. Since there is very often a combination of W wind and swell offshore, it is recommended that the starboard anchor be used. Vessels are advised not to anchor within 1 mile of the breakwater head so as to maintain maneuvering room when entering the harbor.

Anchorage is not permitted in the approach channel of Port Elizabeth Harbor.

## Port Elizabeth to Cape Padrone

**2.4** The Zwartkops River, about 5.5 miles N of Port Elizabeth, has only a few feet on its bar at LW, and the surf is frequently heavy. The river is navigable by small vessels for 8 or 9 miles from its mouth.

**St. Croix Island** (33° 47'S., 25° 46'E.) Fair anchorage can be taken about 0.3 mile NW of St. Croix Island, in 18m, sand, with the W peak of that island bearing 140°. In this position the heavy sea caused by E and SE gales is considerably broken, but the extent of sheltered anchorage is confined to a very small space by the shape of the island.

**Bird Islands** (33° 50'S., 26° 17'E.), the largest of the group, is marked by a light on its SE side.

Bird Islands affords indifferent anchorage on the N side, the holding ground is poor and uneven. With SE winds a vessel can anchor in 18m or 20m, with the lighthouse seen between Stag and Seal Islands, bearing 146°. This a good spot for shelter, but should the wind shift and become strong from the W, a vessel should anchor more to the E, with Black Rocks in range with Stag Island, about 254°, or a little open on either side of it, in from 14 to 18m, but the holding ground is bad.

Anchorage is also available about 0.3 mile ENE of Bird Island, in about 6 to 9m.

**Directions.**—If eastbound from Algoa Bay, in favorable weather, Bird Island Passage is recommended, as it avoids the SW current always running outside. The channel is 3 miles wide and clear of danger, the depths being from 14.6 to 31m.

Vessels using the passage at night are recommended to keep nearer the mainland than to the group, as the land is higher and more readily discerned and the constant roar of the surf more distinctly heard than the breakers on the rocky reefs of the group. With care, the lead will indicate not too near approach to the main shore, and vessels should generally keep in soundings of more than 18m, except off Woody Cape where patches of not less than 15.5m may be encountered as much as 1.5 miles from the cape. A berth of 3 miles should be given to Cape Padrone, off which foul ground extends for about 1.5 miles.

A vessel passing outside the group should not approach within 3 miles of the light, as no advantage is gained by it, and the current, though not generally strong, is uncertain and irregular, both in strength and direction, in the vicinity of the group.

**Caution.**—In thick weather, a vessel should not approach the Bird Islands in depths of less than 110m.

**Cape Padrone** (33° 46'S., 26° 28'E.) is the E extremity of a sandstone cliff, about 1 mile in length and from 10 to 15m

high. Foul ground, which breaks heavily in bad weather, extends 1.5 miles S of the cape.

It is advisable for vessels to pass at least 3 miles SE of Cape Padrone, keeping in depths of 75m or more at night or in poor visibility.

## Cape Padrone to Port Alfred

**2.5** From Cape Padrone the coast trends in a general ENE direction to Port Alfred. The coast is indented by several coves and several rivers enter the sea. Coastal sand dunes, covered with scrub, lie behind the beach, but they are small in extent and not very high.

In this coastal area, the 15m curve lies from 0.4 mile to 2 miles offshore and the 30m curve lies up to 3.5 miles offshore.

A number of unlit research buoys are established along this part of the coast.

**Bokneskop** (33° 42'S., 26° 34'E.), 199m high, is flat-topped and wooded; it rises 6.5 miles NE of Cape Padrone. Though less prominent than Nanquas Kop, 3 miles WSW, it nevertheless provides a useful mark for identifying the locality.

**Kwaai Hoek** (33° 43'S., 26° 38'E.), or False Islet, is a dark grass-covered headland, 28m high, situated 8.5 miles ENE of Cape Padrone. There are drying rocks located close S and E of the point. A cross, 5m high, stands on the point and a water tower stands on the coast about 2 miles WSW of the cross.

**Kenton-on-Sea** (33° 41'S., 26° 40'E.) is a resort, situated on the high bush-covered land, between the Boesmans River and the Kariega River. The resort is not prominent, but at night the lights of the hotel are usually visible from 5 to 6 miles offshore.

**Glendower Peak** (33° 37'S., 26° 49'E.), surmounted by a beacon, rises to a height of 193m. This prominent landmark is visible up to 20 miles offshore.

**Port Alfred** (33° 36'S., 26° 54'E.) is situated at the mouth of Kowie River, which flows out between training walls; a light is exhibited at the head of the S wall. A bridge spans the river, about 0.5 mile within the entrance and is prominent.

Fountain Rocks, a group of drying and below water rocks, lie between 0.7 and 2.1 miles E of the training wall light. Breakers stretch from the rocks to the shore, about 0.2 and 0.6 mile distant, if there is any swell running.

**Jansen's Rock** (33° 36'S., 26° 56'E.) lies, awash, 0.3 mile E of Fountain Rocks, but its position may not be apparent at HW as the sea does not always break over it.

**Anchorage** is available with the light at Port Alfred, bearing 305°, about 1.5 miles distance, in a depth of 30m, sand. The holding ground is poor and ships at anchor should be prepared to put to sea immediately on the approach of bad weather.

## Port Alfred to East London

**2.6** Between Port Alfred and Keiskama Point, 34 miles NE, the coastal ridge is faced with sand and rises to heights of 100 to 120m in places. A hill, 149m in height, located 5 miles ENE of Port Alfred, is prominent from SW and E. The hill's summit is wooded.

The hills at Bathurst, 7 miles WNW of Port Alfred, and the range of mountains in the vicinity of Grahamstown, 25 miles NW of Port Alfred, are conspicuous.



*Courtesy of Simon Baillie-Cooper*

## Great Fish Light

**Rietpunt** (33° 34'S., 27° 01'E.), a low, sandy point, is located 5.7 miles ENE of Port Alfred. A reef of below water rocks, which usually break heavily, extends 0.8 mile SE of the point and there are depths of 10 to 12m, 1.5 miles offshore. Due to the possibility of onshore sets, Rietpunt should be given a berth of at least 4 miles.

**Great Fish Point** (33° 31'S., 27° 07'E.), marked by a light, is low, sandy, and fringed with rocks.

Great Fish River enters the sea 3 miles NE of Great Fish Point; Rocky Point is the E entrance point of the river.

The waters of the Great Fish River are reddish in color and after a rain the sea may be discolored as far as Kowie Point, 16 miles SW.

**Maitland Hill** (33° 26'S., 27° 09'E.) is 176m high, and is the highest of two grassy hills; it is visible from most directions and is a good mark for identifying the locality.

A dangerous rock, with a depth of 2.7m, lies just over 1 mile ENE of Rocky Point; in fine weather the sea seldom breaks over this rock.

Stalwart Point is sandy with bush-covered sand dunes behind it. It may be identified by Maitland Hill and by a conspicuous dark hill, 112m high, lying 1 mile NW. Shoal rocky ground extends up to 0.8 mile seaward of the point, which should be given a wide berth.



A brush covered hill, 78m high, rises 3.5 miles ENE of Stalwart Point and Skiet Kop, a prominent round topped grassy hill, 165m high, stands 6.3 miles NE of the same point.

**2.7 Madagascar Reef** (33° 23'S., 27° 21'E.) lies 0.5 mile offshore, 7.7 miles ENE of Stalwart Point; the sea always breaks over this reef which dries to 1m.

**Keiskama Point** (33° 18'S., 27° 29'E.) is low, sandy, and fringed with rocks. Near its extremity, is a prominent bush covered sand dune, 28m high, which resembles an islet when viewed from the SW. A sand spit, with depths of less than 10m, extends 0.6 mile SE of the point; with a moderate swell the sea breaks heavily over this spit.

Between Keiskama Point and East London the coast consists of sandy beach fringed, intermittently, with rocky ledges; several large rock outcrops also occur. The coastal ridges are usually bush covered except within 5 miles W of Hood Point, where considerable areas have been cleared. Within the coast, the terrain is predominantly high, open grassland, intersected by the ravines of several rivers.

The 15m curve lies up to 0.8 mile off this section of the coast and the 30m curve lies up to 1.5 miles offshore. There are no charted dangers seaward of the 15m curve. A depth of 7.3m is charted in a position 0.5 mile SE of Keiskama Point.

The **Keiskama River** (33° 17'S., 27° 29'E.), the most prominent one on this coast, flows into the sea, 1 mile NE of Keiskama Point. Other good marks for identifying the area are Patos Kop rising 9.5 miles NW of Keiskama Point; Hamburg North, a conspicuous hill, 166m high, 3.25 miles WNW of the same point; and Mount Vale (33° 10'S., 27° 26'E.), a prominent dark bluff, 283m high, situated 8 miles NNW of the mouth of the Keiskama River.

**Cove Rock** (33° 05'S., 27° 50'E.), is a conspicuous wedge shaped rock, 26m high, with a deep notch in the middle. It forms the extremity of a sandy spit extending from Bisserton, a conspicuous bushy sandhill, 86m high. From a distance, Cove Rock resembles an islet and makes a good mark for vessels proceeding along the coast.

**Hood Point** (33° 03'S., 27° 54'E.) has a conspicuous tower standing about 1.7 miles W of it; a radar tower, 51m high, stands at an elevation of 293m, about 5 miles WNW of the conspicuous tower.

## East London (33° 02'S., 27° 55'E.)

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**2.8** East London, the city, is situated on both banks of the Buffalo River; it is the principal city of the Border District of Cape Province.

The Port of East London comprises an outer anchorage and the harbor within the breakwaters at the mouth of the Buffalo River. The limits of the port are best seen on the chart.

**Winds—Weather.**—The prevailing wind direction is NE, the next in order of frequency is from the SW; WNW winds are also frequent. Winds from the N do not blow more than 2 hours in three days and winds from SE and adjacent directions are even less frequent. The prevailing winds blow up and down the coast, but neither onshore or offshore.



*Courtesy of Simon Baillie-Cooper*  
**Hood Point Light**

The annual variation is not very great, but both the NE and SW winds tend to turn more to the N during the colder months, April to August, and then to the S, between October and March. In July the most frequent directions are from NNE and NW.

The average velocity of the wind is about 17 knots but velocities exceeding 70 knots have been known to occur in each month during the second half of the year.

The weather near East London presents a marked difference to that on any other part of the coast. When the mercury commences to rise, on the wind shifting to the W, the crisis is accompanied by lightning, thunder, and heavy rain. If the wind shifts suddenly SW in a squall, with a rapidly increasing barometric pressure, a fresh gale may be expected, with fine weather, which will continue until the mercury rises to about 1030mb.

If the barometer remains low and steady, a strong gale from WNW may be expected, probably lasting several days; but if the wind shifts slowly to the SW, the barometer rising slowly, with drizzling rain, a strong gale and high sea may be looked for.

In such a case, the wind begins to blow hard from the W, and veers slowly SW until the mercury stands at about 1016mb.

The sky becomes leaden, thick, drizzling rain sets in, and the mercury oscillates between 1016 to 1020mb, the temperature being considerably below the average.

In June, July, and August these much dreaded SW winds often follow unsettled weather, preceded by moderate to fresh E breezes and a falling barometer. They blow with considerable violence and have caused many disasters to shipping in East London Roads.

The prevailing winds present severe pilotage problems to ships of great length with high freeboard. From October to April, E winds are the most prevalent, and SE gales may be expected.

Rollers, seldom setting in during the summer months, are frequent during the winter, and generally break in a depth of about 5.5m, in stormy weather in 9.1m, and sometimes even in 12.8m or 14.6m.

**Tides—Currents.**—The ingoing tidal current sets across the bar and into the river at a velocity of 0.75 knot. The outgoing current, has a velocity of about 1 knot, except during freshets, when it may be stronger. The currents turn at about the time of HW and LW, setting inward on the rising tide.

At the anchorage off East London the current generally sets SW from 1 to 2.5 knots, but in calm weather or during strong SW winds the surface water is retarded and occasionally sets E at about 0.5 knot or even more.

Inshore, near the edge of the breakers, an eddy current frequently sets E. This current varies in strength, but seldom attains a velocity of 0.5 knot. In the offing, about 15 miles from the coast, the regular Agulhas Current sets steadily SW at velocities from 2 to 4 knots.

**Depths—Limitations.**—Passenger and dry cargo vessels are limited to lengths of 239m, while tankers are limited to 204m. Each class may not have a draft exceeding 9.9m. Container and ro-ro vessels berth at West Quay and Quays 5 and 6, respectively. The depths alongside the quays range from 6 to 10.7m. The fairway between the breakwaters is maintained at a depth of 10.7m by dredging. It has been reported that depths of 6.1m may exist up to 0.1 mile E of the S breakwater light.

**Aspect.**—Among the conspicuous marks in the approach to East London, is the tower 3 miles W of the head of the breakwater; a grain elevator 0.6 mile WSW of the same position; a radio mast standing 1.2 miles WSW and a silo 0.2 mile N of the radio mast; and a radio tower. A building, the most prominent of several hotels on the waterfront, stands 0.7 mile NNW of the head of the S breakwater.

The aluminum buildings, 4.5 miles NNW of the head of the S breakwater, shine brilliantly in the sun in the forenoon.

**Pilotage.**—Pilotage is compulsory for merchant vessels entering, leaving or shifting berths. One hour advance notice to be given to the Port Captain via VHF channel 16, working channel 12. All vessels should also report by VHF radio to port control when passing reporting stations, which are 16 miles SW and 16 miles NE of the port.

The pilot embarks 2.3 miles ENE of the harbor entrance. Except in emergency, vessels can enter the port only during daylight hours. Tankers are handled during daylight hours only.

**Signals.**—All traffic and weather information is communicated by VHF radio.

**Anchorage.**—The recommended anchorage, clear of the harbor entrance, is in a depth of about 30m, fine sand bottom, 0.8 mile E of the S breakwater light. In fine settled weather, ships might anchor closer to the light on the same bearing, but never closer than 0.5 mile or in less water than 25m, and then only if remaining at anchor for a short while.

There is anchorage for small ships, in a position 1 mile NE of the breakwater light and 0.3 mile clear of the range line, in a depth of 15m, this anchorage should only be used in fine weather.

The anchorage is considerably exposed, and vessels generally lie broadside to the sea to limit the great extent of roll and strain. Vessels making a short stay may anchor, but any vessels running the risk of lying at the anchorage in bad weather should never be in depths less than 21m.

**Directions.**—Vessels from SW, having identified Cove Rock and Bisserton, should not approach the coast nearer than 2 miles or in depths less than 65m until close to port. When Hood Point Light, the grain elevator, and the head of S breakwater have been passed abeam, course should be altered to steer for the pilot boarding position.

Vessels from the NE, having identified the conspicuous Black Beacon some 15 miles NE of the port, should keep at least 2.5 miles offshore until Kwelegapunt, 8 miles NE of Nahoon Point, is abeam 2.5 miles distant, when course for the pilot station may be steered for. Vessels awaiting the pilot should heave to, or anchor NE of the pilot station.

## East London to Mbashe Point

**2.9** Between East London and Mbashe Point, the coast is a succession of rocky points, with sandy beaches between them. The sea breaks heavily on these beaches and few of them are suitable for landing, even in fine weather.

To distinguish the monotonous coast when viewing East London from the NE, a black wooden pyramidal beacon, 15.9m high, stands on a 96m hill in a position nearly 0.5 mile NW of Reef Point (32° 51'S., 28° 07'E.).

**Cape Morgan** (32° 42'S., 28° 22'E.) appears from seaward as a flat topped hill, covered with bushes. It has been reported that Cape Morgan is marked by a light. Vessels should give Cape Morgan, a berth of at least 2 miles when transiting the coast.

Shelter from NW and W winds may be obtained at from 0.5 to 0.8 mile NE of Cape Morgan and the same distance offshore.

The Great Kei River empties about 2 miles NE of Cape Morgan. The village of Keimouth, close to the W entrance, is conspicuous. Local knowledge is essential when entering the Great Kei River.

Sandy Point rises rapidly to Bowkers Bluff, which has four distinct hills.

Bowkers Bay, NE of Sandy Point, is a bight into which a river flows. There is good anchorage, with shelter from W winds, in 19m, sand, 1 mile off the river; the bay being, under favorable circumstances, appeared to afford the best anchorage on this part of the coast. A drying rocky outcrop, lies 0.5 mile S of the river's mouth.

The Mbashe River flows into the sea in position 32° 15'S, 28° 54'E. Good anchorage can be obtained in 20m, sand, ESE of the river entrance.

Rollers set in after a strong W or SW breeze, occasionally breaking in 10.9m or 12.8m, but generally, off the mouth of the river, in 6.4m or 7.3m.

**Mbashe Point** (32° 15'S., 28° 55'E.) has light structure standing on the point which appears conspicuous against the dark background. A radiobeacon transmits from the light structure.

### Mbashe Point to Port St. Johns

**2.10** Between Mbashe Point and **Cape Hermes** (31° 38'S., 29° 33'E.), the Agulhas current is SW, but is generally much weaker close inshore than 2 to 3 miles to seaward. In the vicinity of Port St. John's, however, the strength of the current is felt closer inshore than off any other part of this coast.

Along this section of the coast the 15m curve lies up to 0.6 mile offshore, and the 30m curve lies up to 1.5 miles offshore. All charted dangers lie inside the 15m curve.

Rocks, which nearly always break, lie up to 0.8 mile off the mouth of the Nkanya River 4.8 miles NE of Mbashe Point.

**Hole in the Wall** (32° 02'S., 29° 07'E.) is formed by two remarkable and prominent rocks which lie at the entrance of the Mpako River, about 10.5 miles NE of the Nkanya River. The SW rock is 44m high, with a flat top, and has a natural archway cut through its base. The NE rock is larger, 64m high, and has a deep wedge-shaped cleft in its summit.

**Whale Rock Point** (31° 56'S., 29° 13'E.), 8.5 miles NE of Hole in the Wall, is low and has a sandy beach fringed with a reef. Whale Rock lies on the N part of a below water reef, which extends 0.4 mile SE of the point.

**Rame Head** (31° 48'S., 29° 21'E.) is a bold precipitous headland which rises to a height of 123m, 0.6 mile W of its extremity. The headland stands out prominently both N and S.

Ecingweni, a conspicuous hill, 235m high, rises 4.5 miles WSW of Rame Head. Mpotshotshe, 284m high, is a conspicuous dome shaped hill 3.5 miles NNW of Rame Head. It shows up well from the S, but is obscured from the N.

**2.11 Brazen Head** (31° 43'S., 29° 23'E.), 5 miles NE of Rame Head, is one of the most conspicuous features on this part of the coast. The cliffs rise vertically from the sea for as much as 150m, in places, then rise steeply to an elevation of 200m, then slope gradually to Ndluzula Hill, 242m high, surmounted by a clump of trees, 0.5 mile inland.

**Green Peaks** (31° 41'S., 29° 28'E.) are two remarkable peaks, 0.5 mile apart, lying 5 miles NE of Brazen Head. The SW peak is 168m high and covered with grass. The NE peak, 199m high, is thickly covered with bushes on its SE side and has a bare top, which looks like a grassy knoll when viewed from NE. Both peaks are prominent when viewed from the NE.

Sugarloaf Rock, a conical rock, 8m high, is connected to the coast, 0.5 mile E of Green Peaks, by a causeway of sand and rocks. It is prominent when viewed from SW or NE, close inshore, but merges with the background from a distance.

**Cape Hermes** (31° 38'S., 29° 33'E.) is formed by a round, grass covered hill, 148m in height. A conspicuous white house, with a red roof, adjoins the light structure on the cape.

**Port St. Johns** (31° 38'S., 29° 33'E.) lies between Cape Hermes and Bluff Point. The SW part of this indentation is

known as Gordon Bay and it is into this bay that the Umzimvubu River flows.

Close inshore, during the ingoing tidal current, which runs regularly, a strong current has been found, setting S along the sandy shore inside the breakers, and along the rocky shore in the direction of Cape Hermes.

At the entrance of the river, there is a table mountain 366m high, which appears to have been cleft to its base, leaving a wedge-shaped gap in the center, through, which the river flows.

**Anchorage.**—Gordon Bay affords fair anchorage, but is exposed to winds from NE through S to WSW. Anchorage can be found in 18m, sand, good holding ground, about 0.8 mile E of Cape Hermes Light. Caution is necessary, as the depths are liable to constant change. More sheltered anchorage can be found closer in, with Cape Hermes Light, bearing 255°, distant 0.5 mile.

### Port St. Johns to North Sand Bluff

**2.12** The general trend of the coastline from Port St. Johns to South Sand Bluff is NE. There are coves at the mouths of the many rivers, which empty into the sea in this area. The shore is fronted by bluffs, with few sandy beaches, backed by prominent coastal hills.

The 30m line lies up to 1.3 miles offshore; there are no charted dangers seaward of this line.

Care must be taken to avoid being set into the bight SW of Waterfall Bluff. When in this vicinity, at night, it is advisable to sound continuously and keep in depths of 75m or more.

**Waterfall Bluff** (31° 26'S., 29° 48'E.) lies about 17 miles NE of Port St. James. There are two principal waterfalls over the bluff; the W drops sheer into the sea but is not as conspicuous as the E, which is larger and drops in terraces. In the dry season, not much water flows over either falls.

The Mzintlava River, about midway between Port St. John and Waterfall Bluff, flows between steep banks, which are thickly wooded and rise close on the N side to a height of 235m. Manthlonetchwa Hill (31° 31'S., 29° 40'E.), is a conspicuous bare hill, with two flat summits, which rises to a height of 256m, on the S side of the river, 1 mile inland.

To the N of Waterfall Bluff, the general aspect of the land within the coast changes completely. The mountain ranges can still be seen, but close within the coast the land rises gradually to a ridge 335 to 365m high, lying 2 or 3 miles inland.

**2.13 Lambasi Bay** (31° 23'S., 29° 54'E.), 5.8 miles NE of Waterfall Bluff, is a small indentation in the coast formed at the mouth of the Tezana River, which enters the sea through a deep bush covered ravine. On the N side of the bay the houses of Port Grosvenor are noticeable from seaward.

Grosvenor Hill, 3 miles NNW of Lambasi Bay, is 337m high. The hill, which is higher than the adjacent coast, is conspicuous.

**South Sand Bluff** (31° 19'S., 29° 29'E.) is a most conspicuous mark. From the S it appears as a dome-shaped hill topped with bushes. A white sand patch, which cannot be seen when bearing less than 270°, covers its lower slopes. From the N it appears as a densely wooded pyramid. The bluff is marked by a light.

**2.14 Quoin Hill** (31° 15'S., 30° 02'E.), 5.5 miles NE of South Sand Bluff, is 59m high, and covered with bush. The hill appears dark in comparison, with the adjacent coast which makes it conspicuous.

Red Hill, 4 miles NNE of Quoin Hill, rises to a height of 87m, it is a conspicuous rounded hill, about 0.3 mile inland.

**Mtamvuna River** (31° 05'S., 30° 11'E.) enters the sea 9 miles NE of Red Hill. The mouth of the river is spanned by a conspicuous bridge.

**North Sand Bluff** (31° 03'S., 30° 14'E.), about 2 miles NE of the mouth of Mtamvuna River, is an isolated conical hill covered, with dark bushes. This conspicuous hill is 69m high and is especially visible from the NE; it is marked by a light.

### North Sand Bluff to Green Point

**2.15** Between North Sand Bluff and Margate, the coast consists of rocky ledges and shallow sandy bays. Several rivers flow into the sea along the entire coast. Northeast of Margate there are a number of villages and holiday resorts, which may be identified.

**Inkulu** (30° 59'S., 30° 11'E.), 418m and 421m high, are conspicuous double peaks rising about 4.5 miles NNW of North Sand Bluff.

Evungo, 7 miles WNW of Margate, is a whale-shaped mountain, 550m high, with its NE end apparently terminating in a bold cliff. It is conspicuous from S, but becomes difficult to identify from N of E.

**Protea Banks** (30° 50'S., 30° 29'E.), lying offshore about 7 miles NE of Margate, have a least depth of 26m. An isolated patch, with a depth of 14.6m, lies close WSW of the bank, about 2.5 miles offshore.

**Margate** (30° 52'S., 30° 22'E.) is a seaside resort with a conspicuous hotel. A radio mast, 412m high, stands 4 miles NW of town.

St. Michael's on Sea, a resort, is situated 3 miles NE of Margate. Beach Terminus, 2.5 miles NE of St. Michael's on Sea, is a resort situated on the S side of the mouth of the Izotsha River, which is the largest of the rivers on this stretch of coast.

**Port Shepstone** (30° 44'S., 30° 28'E.) is located on the S, and North Shepstone on the N bank of the Umzimkulu River; they are easily recognized as they are the only large villages in the vicinity. Port Shepstone Light is not very conspicuous. A convent, a large red building, located about 0.4 mile W of the lighthouse, is conspicuous from N and E, but is shut in as a vessel proceeds S. A radio tower stands about 0.5 mile W of the S entrance point of the river.

**2.16** Between Port Shepstone and Green Point, 34 miles NE, several rivers flow into the sea, but all their mouths have completely been closed by sand. The coast presents few conspicuous natural features, although the various villages may be readily identified.

The **Umzumbe River** (30° 37'S., 30° 33'E.) flows into the sea about 8.8 miles NNE of Port Shepstone; a village by the same name stands on the S bank. A conspicuous red brick convent stands on a hill about 0.5 mile S of the village.



*Courtesy of Simon Baillie-Cooper*

### Port Shepstone Light

A radio tower, showing red obstruction lights, stands about 2.5 miles NNE of the convent. About 4.5 miles NNE of the convent there is a red hill 106m high, in the form of a ridge; about 1.5 miles further NNE there is another red hill, which is dome shaped, that rises to a height of 102m.

The **Mtwalume River** (30° 29'S., 30° 38'E.) flows into the sea, between steep banks 8.5 miles NE of the Umzumbe River. This is the most noticeable river on this part of the coast, but it is obscured when close inshore. A conspicuous hotel, which is long and low, stands on the S entrance of the river.

At **Sezela** (30° 24'S., 30° 41'E.), 5 miles NE of the Mtwalume River, there are three conspicuous chimneys of a sugar mill. From May to December, the glare from the mill can be seen at night and forms a useful mark. Umdoni House, standing about 1.5 miles NE of the sugar mill, is the only white house with a red gabled roof in the vicinity and is a conspicuous landmark. A disused whaling station, located about 4 miles NE of Umdoni House, is obscured when viewed from S, but is conspicuous when viewed from elsewhere.

**Scottburgh** (30° 17'S., 30° 45'E.) is a small village. Vessels should be careful not to confuse the glare of the sugar mill at Sezela, with this village at night. A beacon stands at an elevation of 48m on a hill near the shore at Scottburgh. A radio





*Courtesy of Simon Baillie-Cooper*

### Green Point Light

tower stands about 1 mile WSW of the beacon. A water tower stands near the coast, 1 mile N of Scottburgh.

**Green Point** (30° 15'S., 30° 47'E.) has a dark wooded hill, rising to an elevation of 110m, 0.6 mile inland from its extremity. Although the lighthouse on Green Point can be seen from a great distance in clear weather, burning of sugarcane and grass takes place at times and may cause a haze over the lighthouse and adjacent coast. A beacon, stands about 0.3 mile ESE of the lighthouse; the lighthouse and beacon, in range 285°, indicate the position of Aliwal Shoal.

**Aliwal Shoal** (30° 15'S., 30° 50'E.) is the extremity of a shoal area, known as The Ridge, which extends ESE then NE from Scottburgh. The least depth of Aliwal Shoal, 2.7m, lies 2.8 miles, ESE of the light on Green Point; it lies in the red sector of that light. The sea breaks on the shoal. A wreck, with a depth of 2m over the remains, lies close N of the 2.7m depth.

**Currents.**—Currents in the Aliwal Shoal area are generally uncertain, but a weak current, setting WSW across the shoal, may be encountered. Occasionally the counter current of the Agulhas current may be experienced, particularly between the shoal and the coast.

Vessels enroute in this area, by day, should be able to transit the passage inside Aliwal Shoal, provided that the strength and direction of the current are accurately determined.

At night, vessels are recommended to pass outside the shoal, keeping in depths of 50m or more.

### Green Point to Durban

**2.17** Between Green Point and Durban, numerous rivers flow into the sea, but with the exception of the Umkomaas River, all have their mouths closed by sand.

The **Umkomaas River** (30° 12'S., 30° 48'E.) is open at its mouth, but due to its constant surf, it cannot be entered. The river is spanned by a prominent road and rail bridge.

Two hotels in the holiday resort, on the S bank of the Umkomaas River, are conspicuous.

Anchoring is prohibited, within an area 1 mile wide, extending 2 miles ESE, from the mouth of Umkomaas River.

**Illovo Spit** (30° 09'S., 30° 52'E.), a bank with depths from 12.8 to 17.3m, extends 2 miles offshore, about 2.8 miles SSE of the mouth of the Illovo River. A conspicuous water tower stands close SW of the mouth of the Lovu River.

A conspicuous hotel stands on a hill, 101m high, 3 miles NNE of the Lovu River water tower. A conspicuous Y-shaped water tower stands on a hill about 0.6 mile SW of the Lovu River water tower.

**Caution.**—A dangerous wreck, containing cylinders of chlorine gas, which is extremely hazardous and has a highly toxic effect, lies sunk about 3 miles 111° from the above hotel.

**False Bluff** (30° 01'S., 30° 56'E.) resembles Cape Natal. A hill, about 1 mile NE of False Bluff on the S side of Isipingo Beach, has a broad sand patch running from its foot to near its

summit. As this is the only sand visible N of Port Shepstone, it is a very conspicuous landmark.

An offshore oil terminal extends about 1.5 miles from shore E of Isipingo Beach. Tankers up to 330,000 dwt can be accommodated at the SBM (single buoy mooring), moored in a depth of 45m in 30° 00'30"S, 30° 58'29"E. VLCCs must have a 10 ton boom. A mooring master boards about 2 miles E of the SBM.

Vessels are prohibited from entering within 1 mile of the SBM. Floating hoses, which are marked by quick flashing lights, extend up to 305m from the SBM.

A prohibited anchorage area lies approximately 2.5 miles to the NE of the above-mentioned terminals. This area can best be seen on the area chart.

An explosives dumping area is centered in a position about 7 miles SSE of Cape Natal. Another explosives dumping area is centered 33 miles offshore about 39 miles SSE of Cape Natal; the water in this area is about 2,744m deep.

**Cape Natal** (29° 52'S., 31° 04'E.) is a high, wooded tongue of land, terminating in a conspicuous bluff, 59m high. It is easily identified as the coast to the N recedes and is low for several miles. A signal station is located on the bluff 0.3 mile SW of the extremity of Cape Natal. The signal tower is painted white and has been reported as very conspicuous from seaward.

**Caution.**—A sewer outfall pipe extends 1.8 miles SE from Cape Natal from a position on shore SE of the signal tower. Anchoring is prohibited within 0.3 mile of the pipeline.

A lighted buoy (special wave recorder) is moored 1.5 miles SE of the Signal Tower within the prohibited anchorage area and another is 1 mile N of the South Breakwater Light.

A spoil ground, rectangular in shape, 2 miles in extent and with a least charted depth of 55m, lies 3 miles E of Cape Natal.

## Durban (29° 52'S., 31° 02'E.)

World Port Index No. 46850

**2.18** The Port of Durban, the principal port of the Republic of South Africa, is entered close NW of Cape Natal.

The harbor comprises an exposed outer anchorage and a land locked sheltered harbor with extensive quayage and facilities for ocean going vessels. The port is entered between breakwaters. Seaward limits best seen on chart.

## Winds—Weather

The prevailing wind direction at Durban Harbor, for the greater part of the year, is from NE and S, however, in June and July, NE winds are more frequent. Winds from the NE quadrant alternate at intervals seldom exceeding a few days, with winds from the SW quadrant.

During summer, gales are usually of short duration, rarely exceeding 24 hours, but during winter and spring, NE and SW gales may continue for days.

During May to July, inclusive, the finest months, a light breeze comes in from seaward by day, and a land breeze blows at night. But strong gales from the E and W occur in these months.

From August to October, inclusive, the boisterous months, when the range of the barometer is great, gales alternate between E and W.

Gales from E to SE, 50 to 100 miles offshore, are deflected to ENE to NE upon reaching shore. The resulting swell catches vessels in Durban Road and causes them to ride uneasily.

## Tides—Currents

In the outer anchorage the tidal current is northgoing during the rising tide and southgoing during the falling tide.

Off the heads of the breakwaters an eddy, southgoing during the rising tide and northgoing during the falling tide, is often experienced; the position of the dividing line between the two opposing currents varies and may be met close to the breakwaters. Great care is therefore necessary when approaching the harbor entrance.

In the entrance channel the ingoing tidal current has a maximum rate of 2.5 knots at springs and 0.5 knot at neaps; the outgoing current attains 3.5 knots at springs and 1.5 knots at neaps.

Within the harbor there is a strong set across the NE corner of Salisbury Island at springs, the direction of the set being about 270° on the flood tide and 090° on the ebb. Although this set does not extend for more than about 90m down the line of the main wharf of Salisbury Island, it does cause difficulty for ships proceeding alongside the NE berth.

At T Jetty, due to eddies, there is a slight set on to both the E side and the W side during the flood and ebb.

Caution is necessary to allow for the strong current, generally setting SW at velocities of 2 to 3 knots, beyond a distance of 3 miles from the shore.

## Depths—Limitations

The channel entrance, between the S breakwater and North Pier, has been dredged to a depth of 12.8m, and has a width of 155m, narrowing to about 125m. This narrow part of the channel, though seldom impassable, is occasionally dangerous. It is well-marked on the SE side by two caissons, each exhibiting a light, and on the NW side by two lighted buoys separated by another caisson exhibiting a light. The depths alongside the various piers range from 6 to 12.8m. The normal limits for vessels entering the harbor are a draft of 12.2m and a length of 244m. Ships drawing up to 11.5m can enter at all states of the tide. Vessels exceeding the normal limits will be permitted to enter port only in exceptional circumstances.

Ships in excess of 200m in length and 26m in beam may not enter at night. Ships whose beam exceeds 35m are brought into port only when weather conditions are suitable.

The tanker terminal has five berths 183 to 244m in length and will accommodate vessels with a draft up to 11.5m.

The five deep sea common-user container berths will accommodate a maximum draft of 12.2m. Two of these container berths have ro-ro facilities.

**Note.**—Oil tankers and ships carrying explosives or dangerous goods are restricted to daytime movements.

## Aspect

The Bluff, at the NE end of a ridge, is heavily-wooded and steep and has heights up to 90m; it forms the SE side of Durban Harbor. Among the conspicuous landmarks are the signal tower about 0.7 mile SSW from the head of S breakwater; the water tower about 1.8 miles farther SSW; two radio towers standing close NW of the water tower; five silos, the tallest being 59m in height situated at Island View No. 3 Berth; a water tower at Cooper, 5.3 miles SSW of the head of S breakwater; a water tower 1.4 miles NNE of Cooper; and the dome of the college 4 miles W of the breakwater head.

## Pilotage

Pilotage is compulsory for vessels entering, leaving, or shifting berths within the harbor or in the approaches.

The pilot boards in position about 2 miles NNE of the harbor entrance.

Vessels should give advance notice of their ETA to Port Control from the charted calling in places, which are about 10 miles seaward of S breakwater light, through VHF channel 16. Vessels not equipped with VHF may give their ETA on 2182 kHz.

The pilot boats are equipped with VHF radio; they have black hulls and white superstructure, with the words PILOTS—LOODS in black.

## Signals

The signal tower on The Bluff exhibits the following traffic signals by day and night:

Day	Night	Meaning
Flag I	One green light	Vessel entering harbor.
Flag H	One red light	Vessel leaving harbor.
Flag P	Flashing red light	Port closed. When the bar is dangerous to cross or impassable, the signal is passed by VHF and by flashing red light.

**Storm signals.**—A red light is exhibited from the top of the Port Office when a gale is forecast and is maintained until the weather moderates.

## Anchorage

The best berth in the anchorage area is in 22m, good holding ground, with S breakwater light bearing 197°, and the Anchorage Beacon 254°, but there is no shelter during S and E winds, and a heavy swell always sets in along the coast. In a position farther S the outgoing tidal currents swing vessels broadside on to the swell, causing them to roll heavily.

A vessel arriving in the road during bad weather should radio for instructions before anchoring. Helicopter services are available.

Anchoring is prohibited within 1 mile of the harbor entrance and also within an area, marked on the chart, on either side of the leading line out to a distance of 3 miles from the entrance. Also, anchoring is prohibited on either side of the sewer pipe

which leads in a 128° direction 0.8 mile S of the S breakwater light extending 2 miles.

## Directions

Vessels approaching Durban from SW and having passed Aliwal Shoal may steer for the signal station on The Bluff bearing 020° until the light at Cooper bears 270°. At this time a course of 035° should be steered keeping at least 1 mile offshore. When the signal station on The Bluff bears 270°, the course may be shaped for the anchorage. Vessels approaching the anchorage from the N should avoid the foul ground lying 3.2 miles NNE of Cape Natal.

## Durban to Richards Bay

**2.19** Between Durban and the Tugela River there are no off-lying dangers. Anchoring off this part of the coast is not recommended, but in an emergency the best holding ground will be in depths of 45m; the bottom is chiefly sand or mud, but there are some patches of rocky ground, a few miles SE of the river's mouth.

Between Tugela River and Richards Bay reefs and shoals extend 2.5 miles offshore in places. Vessels should keep at least 3 miles offshore and in depths of more than 38m in the vicinity of Glenton Reef, and Durnford Point should be given a berth of 7 miles.

Inshore currents between Durban and Tugela River are weak, and in depths of less than 90m it is generally influenced by the wind; in greater depths it is more regular and is SW at rates from 0.5 to 1 knot.

Off Durnford Point, in depths greater than 200m, the current is SW at rates from 1 to 2 knots. In depths of less than 200m, a NE counter current with rates from 0.5 to 1 knot will generally be experienced in fine weather. This NE current is influenced by the wind and with fresh NE winds it rapidly changes direction and flows SW at a rate depending on the strength of the wind; surveys of this coast have shown the maximum rate of this current when SW was found to be 0.75 knot. Currents setting N and NW with rates from 0.5 to 1 knot were occasionally observed up to 20 miles offshore SE of Durnford Point. This onshore current is a serious danger in the vicinity of this point.

Observations made during the months of May, June, and July provided the following information concerning currents off the coast between Durnford Point and Cape St. Lucia:

Between Durnford Point and Cunge the current was found to be generally SW, with rates from 0.5 to 1 knot at 2 to 3 miles offshore and 2 knots at 11 miles off Durnford Point. At 2 to 3 miles offshore, after a few hours of W winds, the current became NE at a rate of 0.5 to 1 knot and on one occasion attained a rate of 1.5 knots; this NE current quickly disappeared with a change of wind, and it was rare that no current was experienced.

Between Cunge (28° 40'S., 32° 15'E.) and Cape St. Lucia, the current was always SW to WSW; close to the 200m depth contour the rate was about 3.5 knots, but at 1 to 2 miles offshore the rate was reduced to between 1 and 2 knots. The rate was increased by NE winds and reduced by SW winds.

With a smooth sea, a line of ripples was frequently observed close to the edge of the continental shelf, in depths of 200m the current over the shelf running with considerably reduced strength.

**Caution.**—In 1961, an abnormal variation was reported to exist between Durnford Point and Cape Vidal, particularly in St. Lucia Bay.

During strong S winds heavy seas may be encountered near the edge of the continental shelf in depths of 200m, between Tugela River and Durnford Point.

**2.20 The Umgeni River** (Mgeni River) (29° 49'S., 31° 02'E.) flows into the sea 3.5 miles NNW from Durban S breakwater light. The river is spanned by a conspicuous bridge.

**Aspect.**—A radio mast, situated 2.8 miles N of the mouth of the Umgeni River and a water tower, 0.4 mile NE of mast, and another conspicuous water tower stands 0.9 mile NNE of the above water tower.

A measured distance of 1,852m is situated close N of the mouth of the Umgeni River. The S limit is marked by two beacons, 0.1 mile apart, at the river entrance, the N limit is marked by a beacon on the shore and a white pillar on a building 0.6 mile inland. The marks in line bear 295°, and the running course is 025°-205°.



*Courtesy of Simon Baillie-Cooper*  
**Umhlanga Rocks Light**

**Umhlanga Rocks Light** (29° 44'S., 31° 05'E.) is located 5.5 miles NNE of the mouth of the Umgeni River; the light structure is not easy to identify as it is backed by a conspicuous white hotel. Two dish antenna are situated approximately 1.5 miles NNW of the light.

A wreck, with a least depth of 11m, is situated 1 mile SSE of Umhlanga Rock Light.

**Tugela Bluff** (29° 14'S., 31° 30'E.) is 111m high, black in appearance, and covered with trees. The Tugela River enters the sea close NE of Tugela Bluff and Red Hill, 87m high, rises on the N bank of the river. Red Hill is scarred with red and has a peculiar knob on its summit.

**Glenton Reef** (29° 00'S., 31° 44'E.) stretches along the coast for a distance of about 5 miles, and is up to 1.5 miles offshore in places; the depths are generally under 4m and vessels should not approach the shore in depths less than 25m in this area. Tenedos Shoal extends 1.3 miles SSW from the coast in a position 5.6 miles ENE of the N end of Glenton Reef. The 15m curve lies 5.3 miles offshore 7.3 miles ESE of Tenedos Shoal.

**Vedette Hill** (28° 57'S., 31° 44'E.), 96m high, has a group of buildings in a clump of trees on its summit; it forms a conspicuous landmark.

**2.21 Port Durnford** (28° 55'S., 31° 49'E.) is the name now applied to a small settlement in the plains behind the coastal range some 2.5 miles W of Mainhloyami Hill and about 5 miles NE of Vedette Hill.

Mainhloyami Hill is one of the most prominent landmarks on this coast. The hill appears flat-topped when viewed from the E. A dark bush covered summit, surmounted by a round tree, lies close W of the hill. Durnford, marked by a light and a racon, is situated at the mouth of a river, which is usually blocked by sand, 2.3 miles ENE of Mainhloyami Hill.

**Anchorage.**—Anchorage may be obtained in depths from 10 to 12m, coral and sand, with the entrance to the river bearing about 338° and Durnford Point bearing 063°.

Durnford Point, is a rounded point although not prominent but may be identified by the conspicuous Pudding Hill (28° 53'S., 32° 00'E.) close W of it. Pudding Hill, the most prominent mark in this area, is 79m high, and is thickly wooded. The point and the coast for 2.5 miles each side are fringed, with reefs and depths from 4.5 to 9m, extending 2.5 miles offshore in places; these reefs break in bad weather.

**Caution.**—A dangerous submerged wreck, with a depth of 8.2m and marked by lighted buoys, lies about 7 miles ESE of the light.

## **Richards Bay (28° 48'S., 32° 05'E.)**

[World Port Index No. 46855](#)

**2.22 Richards Bay** is a man-made harbor, with a deep draft terminal for bulk commodities.

**Winds—Weather.**—The predominant wind direction through the year is NNE and NE (combined occurrence 41 percent), fairly often attaining a velocity of about 19 knots. The strongest winds, however, are usually SW (annual average occurrence 11 percent), which in winter can exceed 35 knots (winter average occurrence 2 percent).

Weather in this area is generally moderate throughout the year, with most of the year's rainfall occurring in spring and early summer. However, on occasion, port movements can be hindered by strong to gale force winds described above.

Visibility is almost invariably excellent. Fog is extremely rare in this vicinity; poor visibility, when it occurs, is due to heavy rainfall and squalls. Occasionally, hazy conditions may be caused by dusty offshore breezes.

**Tides—Currents.**—Spring tides rise 1.8m and neap tides rise 1.2m.

**Depths—Limitations.**—The harbor is approached by a dredged channel 700m wide at the seaward end, narrowing to 300m wide at the inner end, where it widens into the harbor itself. The entrance channel has a dredged depth of 24m at the seaward end, gently shelving to 19m where it meets the harbor.

Berth 209 is the chemical tanker berth. Vessels up to 63,000 dwt, with a maximum length of 225m and a maximum draft of 12.5m, can be accommodated.

Berths 301 to 304 have depths of 19m alongside; the maximum draft that can use these berths is 17.5m.

Berth 701 has a dredged depth of 14.5m alongside. Berths 702 to 705 have a dredged depth of 19m alongside. Berths 706 to 708 have a dredged depth of 14.7m alongside.

The maximum draft permitted in the harbor is 17.5m. A vessel of 284,300 dwt, with a length of 343m, has been accommodated. Entry and departure of vessels is at discretion of port captain. There are accommodations for container and ro-ro vessels. Entry into the harbor may be delayed by strong winds, strong cross currents in the approach channel, or by heavy rain affecting visibility.

**Aspect.**—**Ntogande Hill** (28° 43'S., 32° 11'E.), 114m high, is prominent when viewed from the E and NE. A hill, 120m high, 0.8 miles SSE of Ntogande Hill, is more prominent than Ntogande when viewed from the S. The Port Control Office, close N of the root of the N breakwater, is conspicuous and a bluff, 56m high and lying 0.6 mile NE of the Port Control Office is prominent.

**Pilotage.**—Pilotage is compulsory and is available 24 hours.

The pilot meets the vessels in a position bearing 135°, distant 3 miles from the harbor entrance; vessels should not approach closer until contact has been made with Port Control or the pilot boat. A helicopter pilotage service, available 24 hours, is in operation at Richards Bay. Helicopter rendezvous areas for light draft and deep draft vessels will be advised by Port Control. Vessels calling on Richards Bay should report their ETA through Durban Coast Radio Station 48 and 24 hours in advance and report through radio reporting points which are charted 20 miles ENE and SSW, respectively, of Richards Bay. The latter reports are made to Vessel Traffic Control when passing through these positions. If the ETA falls on Saturday, Sunday, or Monday, notice must be given before 12 noon on the previous Friday.

**Signals.**—Traffic signals are shown from a bank of lights shown from the Port Control Office, as follows:

Signal	Meaning
Fixed green lights	Vessel entering harbor
Fixed red lights	Vessel leaving harbor
Flashing red lights	Port closed

When the entrance to the harbor is considered dangerous, this information will be passed by VHF in addition to showing the signal for "Port closed."

**Regulations.**—The "Regulations for the Harbors of the Republic of South Africa" are in force within the Port of Richards Bay.

Passing vessels are to keep clear of the port limits. Deep draft vessels sailing from Richards Bay are restricted in their ability to maneuver for 4 miles from the breakwaters.

**Anchorage.**—Anchorage may be obtained about 3 to 5 miles SE of the S breakwater. The bottom is sand; in strong SW and NE winds, caution should be exercised.

A prohibited anchorage area extends ESE from the head of the N breakwater for a distance of about 4 miles; a pipeline extends seaward in an ESE direction, within the restricted area, from a position on shore 0.4 mile NNE of the head of the breakwater.

## Richards Bay to Levin Point

**2.23** The coast between Richards Bay and Cape St. Lucia, 24 miles NE, is a sandy beach lined with breakers. Landing on this stretch of coast is practically impossible.

**Cone Point** (28° 38'S., 32° 18'E.) lies 15 miles NNE of Richards Bay. The coast between these two points should be given a wide berth, especially in fine weather, when the sea is not breaking over the dangers.

**Nhlabane Rock** (28° 41'S., 32° 16'E.), with a depth of 5.5m, lies about 1 mile offshore, 3 miles SSW of Cone Point. It is the only charted danger seaward of the 15m curve on this section of the coast.

Neill Peak is a conspicuous thickly wooded hill, rising to a height of 107m, about 3 miles SW of Cone Point. A bare sandhill, 108m high, lying 2.3 miles NNE of Cone Point, appears steep and conspicuous from the E.

A water tank at an elevation of 167m stands 6.5 miles NE of Cone Point.

**Cape St. Lucia** (28° 31'S., 32° 24'E.) is low and sandy; it is marked by a light, whose tower is not easy to identify from a distance. A hill, 164m high, rises close within the cape; there is a reddish sand patch on the seaward slope of the hill. Close N of the cape there are some ledges of light, brown rocks and the cape when seen from the E appears as a group of islands.

From Cape St. Lucia, the coastal ridge consists of hills, which are covered with forest and rise to elevations of 180m before terminating in a bluff 6.5 miles N of Cape St. Lucia light. For 2 miles NNE of St. Lucia Bay the coast is backed by grassy bush topped hills, from 30 to 45m high, then a ridge of forest covered hills, from 60 to 75m high, extend 4.5 miles farther N where the hills become more open and grassy.

Between Cape Vidal and Leven Point the coastal range is thickly wooded for the first 7 miles and presents a series of summits. North of these summits, the coastal range is from 90 to 120m high and is faced with sand, which in places, extends halfway up its seaward slope.

**St. Lucia Bay** (28° 23'S., 32° 26'E.) is the slight bight formed at the entrance of St. Lucia Lake 8 miles N of Cape St. Lucia.

**Anchorage.**—Anchorage may be obtained in 18m, about 1.3 miles SE of the entrance to St. Lucia Bay. South of this position the bottom is foul, and farther N the S swell is heavier.



The bay, exposed to winds from SSW through E to NE, has a sandy bottom, with good holding ground, the depths gradually decreasing to the shore.

**Caution.**—In 1961, an abnormal magnetic variation was reported in St. Lucia Bay.

**2.24 Mount Tabor** (28° 15'S., 32° 30'E.), 133m high, rises 8.5 miles NNE of St. Lucia Bay. A conspicuous lookout tower, 96m high, stands 1 mile SSW of Mount Tabor.

**Cape Vidal** (28° 08'S., 32° 24'E.) is conspicuous from all directions; the land close within rises to Bangazi, a peak 149m high. A long triangular patch of sand, visible when bearing less than 270°, extends to the summit of Bangazi; when seen from the S, three reddish patches appear on it.

The sea usually breaks on the below water rocks, which extend about 0.2 mile offshore, about 1 mile S of Cape Vidal. A light stands on the shore W of these rocks.

Mahlonza, situated on the coastal range 2.5 miles N of Cape Vidal, rises to a height of 171m. This hill and King Oscar Hill, 161m high, 2 miles farther N, are prominent.

**Leven Point** (27° 55'S., 32° 36'E.), 12 miles N of Cape Vidal, may be recognized by St. Marys Hill, close N of which are two broad sandy strips extending from the base to the summit of a high neck of land. These strips are visible when bearing less than 270° and serve to identify Leven Point from N. From S, Leven Point appears flat and sandy.

## Levin Point to Maputo

**2.25** Between Leven Point and Red Sand Cliff the coast is backed by wooded hills faced with sand. Gipsy Hill (27° 48'S., 32° 36'E.), 125m high, situated 8 miles N of Leven Point is the only distinctive feature on this stretch of coast.

**Red Sand Cliff** (27° 43'S., 32° 37'E.) forms the seaward face of Ochre Hill, which has an elevation of 115m; the sea in the vicinity is sometimes discolored by red soil eroded from the base of the cliff.

Between Leven Point and Red Sand Cliff, there is a narrow ridge of rock and coral, connected to the coast about 2 miles N of Leven Point, extending 1.3 miles NNE to about 0.6 mile offshore. This ridge is steep-to and has depths from 3.6 to 5.5m. Another shoal with a least depth of 5.5m, lies parallel, with the coast, 0.8 mile offshore, about 6 miles NNE of Leven Point. The sea seldom breaks over these steep-to reefs and it is advisable to keep in depths of more than 55m when off this stretch of coast.

Between Red Sand Cliff and Sordwana Road, there are three distinctive summits. From S to N they are Nkonyane (27° 38'S., 32° 39'E.), 121m high; Mbumba, 134m high; and Ntabende, 137m high. They lie 48 miles NNE, 6.8 miles NNE and 9 miles NNE, respectively, of Ochre Hill.

Ntabende is a conical hill, with a flat top; there are prominent sand intrusions on either side of it.

From Ntabende, the coastal hills become lower and terminate in a prominent dark bluff 37m high, covered with trees and bushes, close within Jesser Point.

**Jesser Point** (27° 33'S., 32° 41'E.) is low and fringed with rocks extending 0.4 mile N; the sea breaks heavily on the rocks. A light stands close SSW of Jesser Point.

**Sordwana Road** (27° 33'S., 32° 43'E.), open to winds from seaward between NE and SW, lies 2 miles N of Ntabende and is no better than other open anchorages on this coast. The holding ground is not good, being partly rock, and nearer the shore it is worse. There is considerable swell and strong onshore winds render the anchorage untenable.

The point on the S side of the bay has a dark bluff, 46m in height, within it is covered with scrub and is conspicuous from seaward.

Temporary anchorage, about 0.5 mile offshore, in 12m, may be found in the bay NNE of a projecting point which affords slight shelter, with the point bearing 203°, distant about 0.5 mile.

**2.26 Sordwana Point** (27° 26'S., 32° 43'E.) is sandy and is backed by a heavily wooded bluff. Dumile Hill, which is conspicuous from all directions, is dome shaped and rises to a height of 134m, 0.9 mile N of Sordwana Point. A beacon stands on the shore about 0.6 mile SSW of the point.

A below water reef, which usually breaks, lies 0.2 mile offshore abreast Dumile Hill. A similar reef, also 0.2 mile offshore, lies 1.5 miles farther NNE.

**Island Rock** (27° 17'S., 32° 47'E.), which is a black outcrop, drying about 1m, lies close offshore 3.5 miles NNE of Hully Point. Normally the sea breaks heavily over the outcrop and the spray, which can be seen from a distance, will indicate its position.

**Black Rock Point** (27° 08'S., 32° 50'E.) is a conspicuous grassy projection 18m high, about 9 miles NNE of Island Rock; it extends 0.15 off the beach. From a distance, the point sometimes has the appearance of a vessel close inshore.

Black Rocks are some remarkable rocks 3.7m high situated on the beach 3.5 miles NNE of Black Rock Point.

Kosi River discharges 11 miles NNE of Black Rocks. Anchorage, no better than other anchorages on this exposed coast, may be taken up off the Kosi River, in 11.9 to 18.3m, but the entrance should not bear N of 250°, the bottom having many rocky patches when S of that line.

Between the Kosi River and Ponta do Ouro, 3 miles NNE, the coast consists of a sandy beach backed by bush topped hills faced with sand, rising to 100m in height.

**2.27 Ponta do Ouro** (26° 51'S., 32° 54'E.) is a dark low cliff. Monte do Ouro, close within the point, rises to an elevation of 120m. A light is exhibited at this point.

From Ponta do Ouro, the coast trends in a NNE direction to Cabo da Inhaca. Cabo da Inhaca is the S entrance point to Baía de Maputo. From Ponta do Ouro to a position 7 miles SSW of Cabo da Inhaca, the coastal hills are from 60 to 120m high, and close to the N part of this area they are thickly wooded.

**Pico Florenco** (26° 45'S., 32° 54'E.), 118m high, is one of three prominent peaks situated 6 miles N of Ponta do Ouro; a tripod beacon, stands on this peak.

Ponta Dobela, marked by a prominent white beacon, is situated near the coast 13.5 miles N of Pico Florenco.

**Baixo de Sao Joao** (26° 21'S., 32° 58'E.), a rocky shoal with, a depth of 9.1m, lies 1.8 miles offshore 10 miles NNE of Ponta Dobela.

**Rocha Ulue** (26° 16'S., 32° 57'E.) is a conspicuous mark resembling the hull of a capsized vessel. It is 52m in length and about 15m high.

Dundas Hill rises 75m, and has two diagonal crossing sandy roads on its seaward slope. These roads form a conspicuous landmark for vessels approaching from the S.

**Cabo de Santa Maria** (26° 05'S., 32° 58'E.) is the N extremity of Peninsula de Santa Maria. A round topped peak, 87m high, is situated 0.5 mile S of the cape. Baixo de Santa Maria, a rocky shoal with a least depth of 14.6m, lies 2.5 miles ESE of Cabo de Santa Maria.

**Ilha da Inhaca** (26° 00'S., 32° 58'E.) lies close N of Peninsula de Santa Maria on the SE side of the entrance to Baía de Maputo. Ponta Torres, the S extremity of Ilha da Inhaca, is separated from the peninsula by an inlet 0.3 mile wide; the channel lies on the S side. The sea frequently breaks on the bar across the inlet, where there are dangerous rocks. Monte Botelho, 87m high, rises near the coast 2.8 miles NNE of Ponta Torres. Monte Inhaca, 2.3 miles NNE of Monte Botelho, is dome shaped and wooded; it is surmounted by a beacon.

**Cabo da Inhaca** (25° 58'S., 33° 00'E.), the NE extremity of Ilha da Inhaca, is a sandy point, rising to a square-topped sandy hummock, which shows up against the darker land behind it. A light is situated on a sandhill about 0.4 mile SW of Cabo da Inhaca; it has been reported (1991) that haze during the day obscures the light structure. A signal station is located near the light.

**Baixo Danae** (25° 54'S., 33° 03'E.) lies about 5 miles NE of Cabo da Inhaca. The sea breaks heavily on the shoal in all types of weather. A current of 1.5 to 2.5 knots sets onto the shoal from SE at all stages of the tide, and especially after strong SW or SE winds.

## Maputo (Lourenco Marques) (25° 58'S., 32° 35'E.)

World Port Index No. 46870

**2.28** Maputo is located at the head of Baía de Maputo (Baía de Lourenco Marques), the port consists of a city and a medium sized natural harbor. Baía de Maputo is entered between Cabo de Inhaca and Ponta da Macaneta (25° 52'S., 32° 45'E.).

**Winds—Weather.**—Because of the position of the port, land and sea breezes are quite marked. Land breezes are most noticeable between April and August and are least noticeable in November and December. The breeze usually commences about midnight and dies away between 0900 and 1000. West winds are rare after midday except when the "hot wind" is blowing from NNW, and it is only when N or S winds blow very strongly that it does not veer to the W quadrant during the night.

The "hot wind" is a hot, dry wind from NNW which blows down from the high plateau of central Africa. It usually lasts only a few hours, giving place to a short calm of 20 minutes duration, when the S wind breaks out with violence, sometimes reaching gale force, bringing dust storms which are less frequent here than in other localities of South Africa.

From October to March, the hottest and dampest months, these winds, alternating with the cold S wind, make the climate unpleasant. There is, however, some relief in the sea breeze and in the rarity of calm. Moderate winds are most frequent, with light breezes at night.

The average wind for the year is force 4 on the Beaufort Scale with the highest wind average from September to

November and the least from February to April. The wind reaches its daily peak about 1700 and the least at 0200.

The weather is pleasant from June to October when there are bright sunny days and the temperature in the shade seldom rises about 27° C, except with a "hot wind", or falls below 16° C but the other half of the year contrasts most unfavorably with this period.

Gales from SW of 36 hours duration are not infrequent, the wind then drawing to the S, and the weather becoming fine at SE, after which the wind draws gradually to NE, continuing fine for a few days. Bad weather always comes on with winds between W and S, improving as the wind draws to E. A gale from S of hurricane force was experienced in the middle of October.

From April to October the sea breezes blow with less force, calms are more frequent, and rain only falls on from 2 to 6 days in a month, where as in the opposite season it may fall on about 11 days in the same period.

**Tides—Currents.**—Seaward of the line of shoals fronting the bay the N current or that of the ingoing tidal current, with a maximum spring velocity of 2 knots, sets obliquely across Canal do Sul, with a strong indraft; caution must be observed in transit. The outgoing tidal current sets in the opposite direction.

Within the line of shoals the SW current, or ingoing tidal current, sets over Xefina Grande Bank, and enters Rio Espirito Santo with maximum rate of from 1 to 3 knots at neaps and springs, respectively, the other current setting in the opposite direction at the same rate.

**Depths—Limitations.**—The approaches to Maputo are greatly encumbered by shoals. Though there are several channels between these shoals, only Canal do Sul and Canal do Norte are marked.

A depth of 9.7m was reported in Canal do Sul and should not be used by deep draft vessels, as depths in the channel are liable to change. Local knowledge is recommended. Canal do Norte has a least depth in 1993 of 8.8m. Recent dredging of the river channel to a depth of 9.4m has been reported. The main wharf has alongside depths of 9 to 10.1m and will accommodate 12 vessels. A depth of 3.3m is charted at the SE end of the wharf and a depth of 4.9m is charted close off the NW end. Container and ro-ro facilities are available.

The ore loading facilities at Matola, farther upstream, is a wharf with a dolphin at each end; maximum permissible length 250m, with a draft of 10.5m on neaps and 11.3m, on springs. A tanker berth at Matola will accommodate vessels with a maximum draft of 9m and a length of 180m.

It should be noted that the depth over the bar will govern the draft of vessels permitted to enter the harbor.

**Aspect.**—The following objects positioned from Ponta Vermelha (25° 59'S., 32° 36'E.) are prominent:

1. A church, 1 mile NNE.
2. The Cathedral, 1.5 miles NW.
3. The Harbor Office, 1.3 miles WNW.

**Pilotage.**—Pilotage is compulsory and available 24 hours. The vessel's ETA and draft should be reported up to 48 hours in advance.

**Anchorage.**—Anchorage may be taken in the approach to Canal do Sul, in a depth of 14 to 17m, with Cabo da Inhaca Light bearing 159°, distant about 3 miles. Anchorage is

available in 12m with Macoma Light (25° 41'S., 32° 46'E.) bearing 313°, 4 miles distant.

Good anchorage can be had in the port in 10 to 13m at a distance of 0.4 mile 170° from the light structure at the entrance of the camber near the offices of the port captain. Portinho da Inhaca is an anchorage lying off Black Bluff, the NW extremity of Ilha da Inhaca.

Good shelter is afforded, from 10 to 20m, from all winds except those from SW which raise a sea at the anchorage. The shoals in the vicinity are of a shifting nature, and local knowledge is required when taking a berth at the anchorage. Machangulo Bay is the SE part of Baía de Maputo. There is anchorage in about 7m, in a narrow space at the head of the bay.

The explosives anchorage is up the river near the entrance of the Rio Matola.

A quarantine anchorage lies 0.5 mile S of Ponta Vermelha.

Unless directed by the pilot, anchorage is prohibited in the river to the NW of a line extending 210° from the light on the S side of the entrance of the camber to the opposite shore.

**Directions.**—The light structure on Black Bluff, marked by Quartel light in range with Ponta dos Elefantes (Gibao Point), the W extremity of Ilha dos Portugueses, bearing 157°, leads E of Baixo Fawn, Xefina Grande Bank, and Barra do Incomati.

Mariners are advised to take special caution when passing Buoy No. 10 in Canal da Xefina where vessels have tended to yaw up to 14°. Lights and buoys in Maputo Bay have been reported extinguished and many buoys are not in their charted position or are missing. Other navigational aids have been reported unreliable.

**Caution.**—A magnetic anomaly in Baía de Maputo causes the variation to change rapidly, giving deflections from -2° to +3° from the normal.

## Maputo to Ponta da Barra

**2.29** Between **Monte Cutfield** (25° 34'S., 32° 51'E.), which is marked by a light reported (1991) to be obscured by trees, and Ponta Pajini the coast consists of sandhills and ridges backed by grassy hills, with trees and bushes on them.

Several shoals with depths of 6.7 to 10.4m fringe the coast and lie as much as 7 miles off the coast from Mabjetxine to the sand dune; heavy tide rips, possibly caused by the uneven depths, have been observed.

**Baixo da Lagoa** (25° 25'S., 33° 12'E.), a narrow ridge of rock and sand with a least charted depth of 4.6m, lies 4 miles offshore ESE of the conspicuous sand dune.

**Ponta Padjini** (25° 20'S., 33° 14'E.) is a dark rocky bluff 75m high. From close inshore it has an irregular and broken appearance; there are several other similar small cliffs in the vicinity. A conspicuous sand dune lies 0.5 mile N of Ponta Padjini.

Between Ponta Padjini and Rio Limpopo the coastal hills are moderately bare; for the first 10 miles they are a light color, but then they become darker and higher.

**2.30 Ponta Chiluela** (25° 17'S., 33° 19'E.) is rocky and projects from the base of the sandhills, close to the HW mark, to form a small cliff 4m high. Three detached rocky shoals,

with depths of 10.4, 5.5 and 9.4m, lie 2.7 miles offshore between the above two points.

**Rio Limpopo** (25° 13'S., 33° 31'E.) flows into the sea and the entrance is well defined. About 1 mile inland there is a conspicuous red-topped hill. Discharge from the river may extend 3 or 4 miles seaward from the river's entrance, and will be noted by the color.

Between Rio Limpopo and Boa Paz (24° 58'S., 34° 10'E.) depths of 35m are found at a fairly constant distance of 3 to 4 miles from the coast, except off Boa Paz light, where these depths are found within 2 miles of the coast from about 5 miles.

Baixos de Inhampura, with depths less than 11m, extend parallel with the coast for 10 miles from a position 4.5 miles E of the mouth of Rio Limpopo. The shallowest part of the shoal, with a depth of 1.5m, lies 9.5 miles ENE of the mouth of the river.

Inland, 4 miles ENE of Rio Limpopo, a conspicuous sand dune considerably higher than the surrounding country, rises to a height of 89m. Kaixaventuane, a summit 112m high, lies 12 miles farther ENE.

A light is exhibited at Boa Paz (24° 58'S., 34° 10'E.) from a tower 8m high. The coast at Boa Paz is about 66m high.

**2.31 Baixos da Boa Paz** (24° 57'S., 34° 27'E.) are formed by a bank of stones, with depths less than 5.5m, which extends along the coast from the vicinity of Boa Paz for a distance of 15 miles. A 2.7m patch, which breaks, lies 8 miles ENE of Boa Paz, about 0.25 offshore. A 1.7m patch lies 0.8 mile offshore 3 miles farther ENE. This patch is dangerous as the sea does not break on it.

Detached patches, with depths of 16m and 17m lie, respectively, 2.3 miles SE and 4.5 miles E of the 1.7m patch.

**Quissico Light** (24° 45'S., 34° 48'E.) is exhibited from a tower 6m in height, and is situated on a dune 51m high, about 37 miles ENE of Boa Paz. A shoal, with a depth of 8.9m, lies 4 miles S of Quissico Light.

A hill, 173m high, stands 2.2 miles inland, 11.7 miles NE of Quissico Light.

**Ponta Zavora** (24° 31'S., 35° 12'E.), 25 miles NE of Quissico Light, has no conspicuous features, but 1.7 miles to the N there is a remarkable sand cliff nearly 0.5 mile in length. Ponta Zavora is marked by a light and a racon; there is a signal station at the light.

**2.32** Cabo Das Correntes lies 30 miles NNE of Ponta Zavora and Ponta da Barra lies about 19 miles farther N. The hills lie 2 to 4 miles inland and rise to heights of over 180m. Heavy breakers have been seen along this coast up to 3 miles distant offshore.

Rocky patches fringe the coast for 8.5 miles NE of Ponta Zavora. A rocky patch with 8.2m lies 3 miles NE of the point, 1.2 miles offshore; another rocky patch, with 3.8m, lies 1 mile offshore 2.7 miles farther NE.

**Cabo das Correntes** (24° 06'S., 35° 30'E.) is a rounded sandy point, which may be identified by a few detached black rocks fringing it; an islet 5m high is situated 2.8 miles SSW of the cape and is connected to the coast by a rock reef.

Between Cabo das Correntes and Cabo Inhambane (23° 52'S., 35° 33'E.) the coast consists of sandhills, when seen

from a distance have the appearance of chalky cliffs, they are visible for quite a distance.

Cabo Inhambane is a small rocky point backed by a grassy, conical hill, 61m high.

Ponta Tofo, a small rocky point fringed by a reef extending 0.3 offshore, lies 1 mile NNW of Cabo Inhambane.

**Ponta da Barra** (23° 47'S., 35° 32'E.), 3.7 miles NNW of Ponta Tofo, is low and is fringed by a reef extending nearly 0.5 mile NE. Within, the point rises to an elevation of 59m, 1 mile SW; this hill has a clump of trees on it which make it easily identified from the N. Ponta da Barra is marked by a light, with a signal station situated near it.